

Art Unit: 2812

SB  
1-27-07 In claim 30, line 20, before "around," insert -- the second volume --.

***Allowable Subject Matter***

2. Claims 15-17, 19, 20, 23, and 27-30 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record, either singly or in combination, fails to disclose the limitations of:

a second integrated circuit die above the first integrated circuit die and spaced apart from the first integrated circuit die by a second distance to form a second volume between the first integrated circuit die and the second integrated circuit die, the second integrated circuit die having a bottom surface closer to the first integrated circuit die and a top surface further from the first integrated circuit die and a plurality of microelectronic devices;

a second plurality of connectors extending from the top surface of the first integrated circuit die to the bottom surface of the second integrated circuit die;

wherein sealing the device comprises substantially sealing the second volume between the first and second integrated circuit dies from a surrounding environment by applying a layer of underfill material extending from the substrate to the second integrated circuit die, the second volume between the first integrated circuit die and the second integrated circuit die and the second volume around the second plurality of connectors being substantially free of the underfill material after sealing the device.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael Plimier on 12/18/06.

The application has been amended as follows:

Cancel claims 18, 21-22 and 24-26.

In claim 15, line 26, after "surrounding environment" insert -- by applying a layer of underfill material extending from the substrate to the second integrated circuit die, the second volume between the first integrated circuit die and the second integrated circuit die and the second volume around the second plurality of connectors being substantially free of the underfill material after sealing the device --

SB  
1/22/07 In claim 30, line <sup>14</sup>~~13~~, after "integrated circuit die having" insert -- a bottom surface closer to the first integrated circuit die and a top surface further from the first integrated circuit die --.

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1/22/07 In claim 30, line <sup>15</sup>~~14~~, after "extending from" insert -- top surface of the --.

SB  
1-22-07 In claim 30, line <sup>16</sup>~~15~~, after "die to the" insert -- bottom surface of the --.

SB  
1-22-07 In claim 30, line <sup>9</sup>~~18~~, after "environment by" insert -- applying --.

SB  
1-22-07 In claim 30, line <sup>19</sup>~~18~~, after "underfill material," insert -- extending from the substrate to the second integrated circuit die, --.